JOURNAL

Making Highways Hazardless

Cancellation Facts and Fables

Fifty Historic Years for Workmen

Those First Men on This 'Moon'

If Seat Belts Were Mandatory

Careers for '61 Graduates

JOURNAL
OF AMERICAN INSURANCE

MAY, 1961 Vol. 37, No. 5

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United States Lines Company

OUR COVERS

TREASURE HUNTERS are still baffled on this 260th anniversary of Captain Kidd's end by the legend depicted on our front cover. Did the notorious pirate bury the fabulous treasure from his captive ship, the *Quedagh Merchant*, along the American coast near New York before he went to his conviction and death on May 23, 1701? If so, where? The mystery has been made all the more tantalizing during recent months by the seizure of the Portuguese luxury cruise ship, *Santa Maria*. And in insurance circles, piracy and its plunder have never been forgotten or neglected subjects.

No ship that Captain Kidd ever coveted could compare with today's superliner, the *United States*, shown on our back cover as she passes the Statue of Liberty outbound on another crossing to Europe. With her goes $35 million in hull and machinery insurance alone. This amount is equally divided between the American market and English underwriters. Of the American half, $7.5 million is placed with 28 insurance companies. The remainder, $10 million, is with the American Hull Insurance Syndicate. Of the English half, Lloyd's has $9.3 million and other companies $8.2 million.

Through widespread reinsurance provisions, the *United States* is a ward of probably every hull insurer in the world. ⊙

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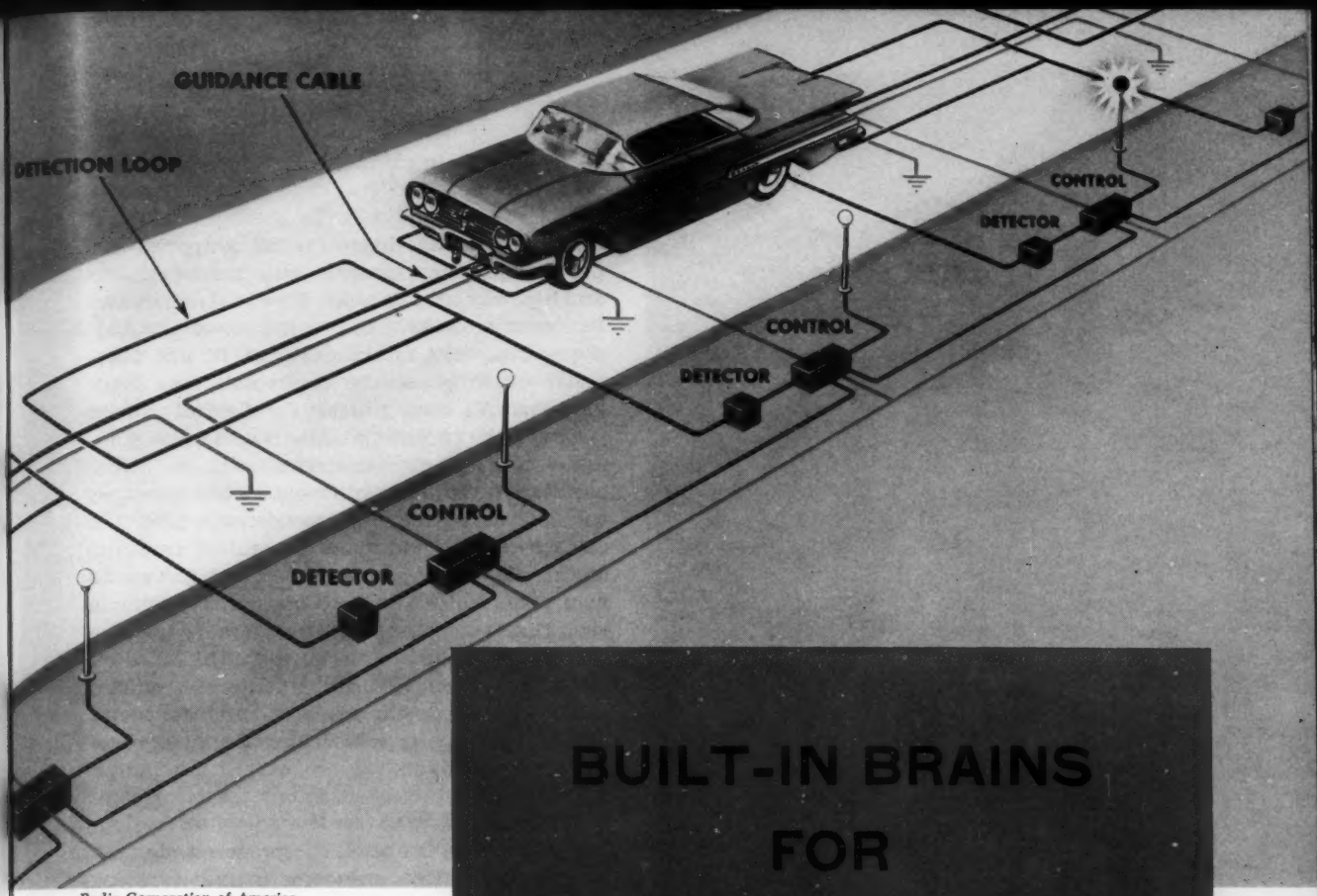


Radio Corporation of America

Wire circuits buried in pavement keep track of vehicle's movement and provide an electrical signal that can be used for all kinds of traffic control, up to and including automated driving.

BUILT-IN BRAINS FOR OUR HIGHWAYS

Electronic devices will space vehicles, control speeds and curb driver errors.

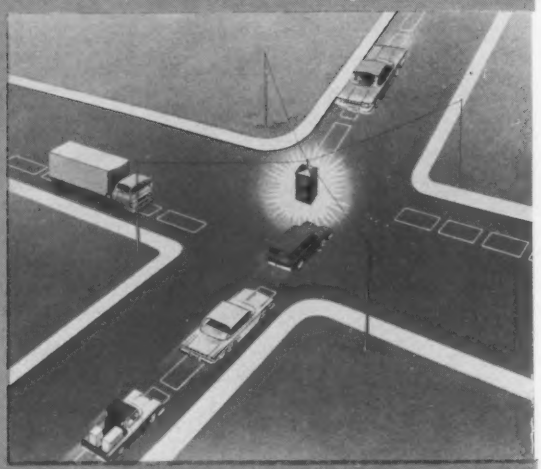
ON AN UNUSUAL ROAD in Princeton, New Jersey, automobiles without drivers start, stop, turn curves and follow other vehicles in a ghostly procession around an oval track.

Driving down a residential street in Detroit, the wife of an engineer turns a corner at night and suddenly feels the brakes go on automatically with a pumping motion that halts the car without skidding. She looks and sees a girl on a bicycle directly in her path.

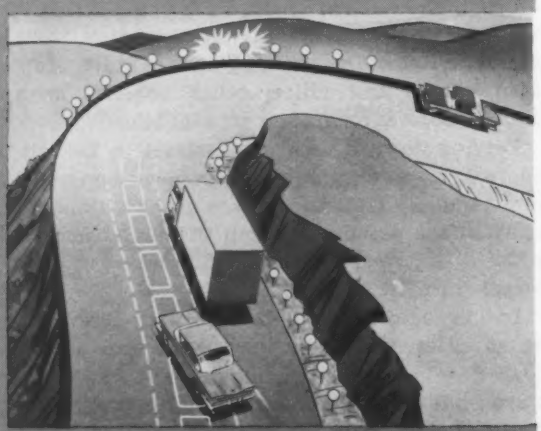
In Chicago, Atlanta, Denver and dozens of other cities, motorists heading in and out of town flow in endless streams along new expressways split by median strips and spliced with graceful cloverleafs.

All these things already are realities—sep-

One early use of RCA's electronic highway system is to warn speeding drivers by means of detector loops buried in the roadbed. With the addition of receivers in the car, loops also can provide dashboard warning.



Traffic lights also can be controlled by electronic circuits that vary the time intervals in accordance with the changing volume of traffic flow. These same control units later could take on more complex tasks.



Third prospective use for electronic loops is to warn drivers of danger on curves, hills, intersections and blind corners by indicating, with lights along roadside, the presence of vehicles and other obscured obstacles.

arate fruits of the ingenuity being applied to a problem plaguing insurers, auto manufacturers and highway officials alike: How to give harassed motorists more help in staying alive. Limited-access highways, mechanical gadgets and automatic controls are the major solutions being proposed. All three narrow the field of human judgment by providing built-in devices to eliminate more and more decisions.

Motorists obviously will need all the help they can get in the coming decade. By 1970, the experts say, an additional 30 million cars and trucks will have squeezed onto the highways to help push motor travel to one trillion miles a year. Unless something drastic is done to improve traffic safety, 53,000 Americans will be killed on the highways in 1970 and another 1.9 million will be injured—a staggering human loss accompanied by property and insurance losses estimated at $9 billion.

Wire in Roadbed Serves for Many Controls

Most imaginative of all the proposed highway safety aids is RCA's electronic highway system, now undergoing extensive experimentation at the corporation's David Sarnoff Research Center in Princeton. Basic unit in the system is a simple wire loop buried in the roadbed and attached to a small electronic detector device. When a vehicle runs over the loop, it disturbs the magnetic field surrounding the wires, providing a signal that can be used for a number of traffic-control functions.

These functions include measuring the speeds of passing autos and flashing a roadside warning to those exceeding the speed limit; flashing warning lights on curves, hills and blind intersections when other vehicles are approaching; and operating a traffic light at varying intervals to handle fluctuating traffic flow. None of these tasks would require special equipment of any kind in automobiles.

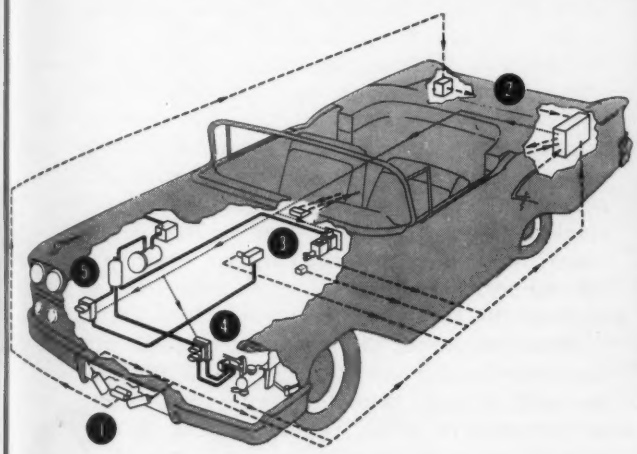
However, these same wire loops also can be used as "building blocks" to produce a system capable of completely automated driving control, enabling electronic devices in the car to take over the job of keeping the vehicle on the road, maintaining a safe speed and even watching out for other cars and obstacles on the highway ahead. Developers of the system believe that something of this kind is necessary to make

driving really safe, since human error already is responsible for an estimated 95 per cent of all highway accidents. The solution, they reason, is to give the driver more usable information and to reduce the necessity for split-second decisions.

As demonstrated at the center, this can be accomplished by placing the wire loops in a continuous network along the highway so that vehicles are always passing over at least part of a loop. Electronic detector units also are linked in a continuous network so that the signal produced by a moving automobile can be transmitted back along the road for any desired distance, fading out as the distance increases. Thus each vehicle is followed by a "flying tail" of electronic signals.

This "flying tail" would serve two purposes. It would turn on a chain of lights along the road to warn drivers of unequipped automobiles that another vehicle was ahead, even in dense fog, and indicate its speed and distance. The second use of the tail is to provide electrical signals to cars equipped with special receiving equipment, giving the driver an audible or visible warning of an obstacle's presence.

The final step is to feed these signals into sophisticated control units developed by Gen-



At RCA's test track in Princeton, New Jersey, car without a steering wheel drives itself with the help of electronic controls in the trunk. Following impulses from wires in the road, these units guide the car and keep it a safe distance behind other vehicles in the same lane. Components needed in the car, as shown in the diagram, include (1) pick-up coils, (2) electronic circuits to receive and interpret the signals, and mechanical devices to operate the (3) brake cylinder, (4) power steering mechanism and (5) accelerator.

General Motors Research Laboratories

eral Motors to operate the automobile's accelerator and brakes. Cars so equipped automatically slow down, speed up or stop if necessary to avoid hitting a car ahead. Put a guidance cable down the center of the traffic lane, and the steering function also can be taken over by an electronic driver.

Chief obstacle to widespread use of the RCA-GM system is its cost. Engineers who witnessed a recent demonstration of the system in action at Princeton estimated installation of roadbed loops and control circuits would add from five to seven per cent to roadbuilding costs. This could amount to an additional $150,000 per mile. Dr. Lawrence R. Hofstad, research vice president at General Motors, estimated the current cost of the car controls at $300 per vehicle, but added that they would be much lower if mass-produced.

Individual elements of the highway system already are being made available commercially. One potential customer is the Federal Aviation Agency, which has an experimental installation at its National Aviation Facilities Experimental Center at Atlantic City. It detects and pinpoints the movement of both planes and ground vehicles entering runways and taxiways on indicator lights on a display panel at the airport control center.

Public Use Depends Upon Highway Engineers

RCA engineers believe the most feasible use of electronic controls for automobiles would be on expressways and other limited-access highways, where the system could be introduced gradually to handle both conventional and automated traffic. How soon this could be achieved depends primarily on how much interest is shown in the system by highway engineers, but the best guess is that public use of electronic highways is at least 15 years away.

Other devices, however, may come much sooner. One promising possibility is a radar brake control developed by Detroit inventor George Rashid, an electronics engineer. In essence, it compensates for poor visibility and the driver's slow reaction time by applying the brake automatically whenever a vehicle so equipped heads into a potential collision.

The unit consists of three principal parts: an antenna about the size of a steak platter, mounted into the auto grille; a compact radar unit small enough to fit in a glove compartment; and a power unit to operate the brake pedal. In addition, there are electrical controls to cut the fuel supply as the brakes are applied and to let the driver override the system at any time either by applying the brakes or by pushing hard on the accelerator.

Operation of the radar control is regulated by the speed of the car and its closing speed with an obstacle. At five miles per hour or less, the radar pulse becomes very weak, allowing the motorist to park without trouble. As the car's speed increases, the pulse becomes stronger and reacts to obstacles farther and farther away.

"Cars equipped with this unit have been operated in mixed traffic, passing cars moving in opposite directions and in the same direction," says Rashid, who first began working on the device in 1941. He indicated that several auto companies are interested in the unit, expected to be in production shortly.

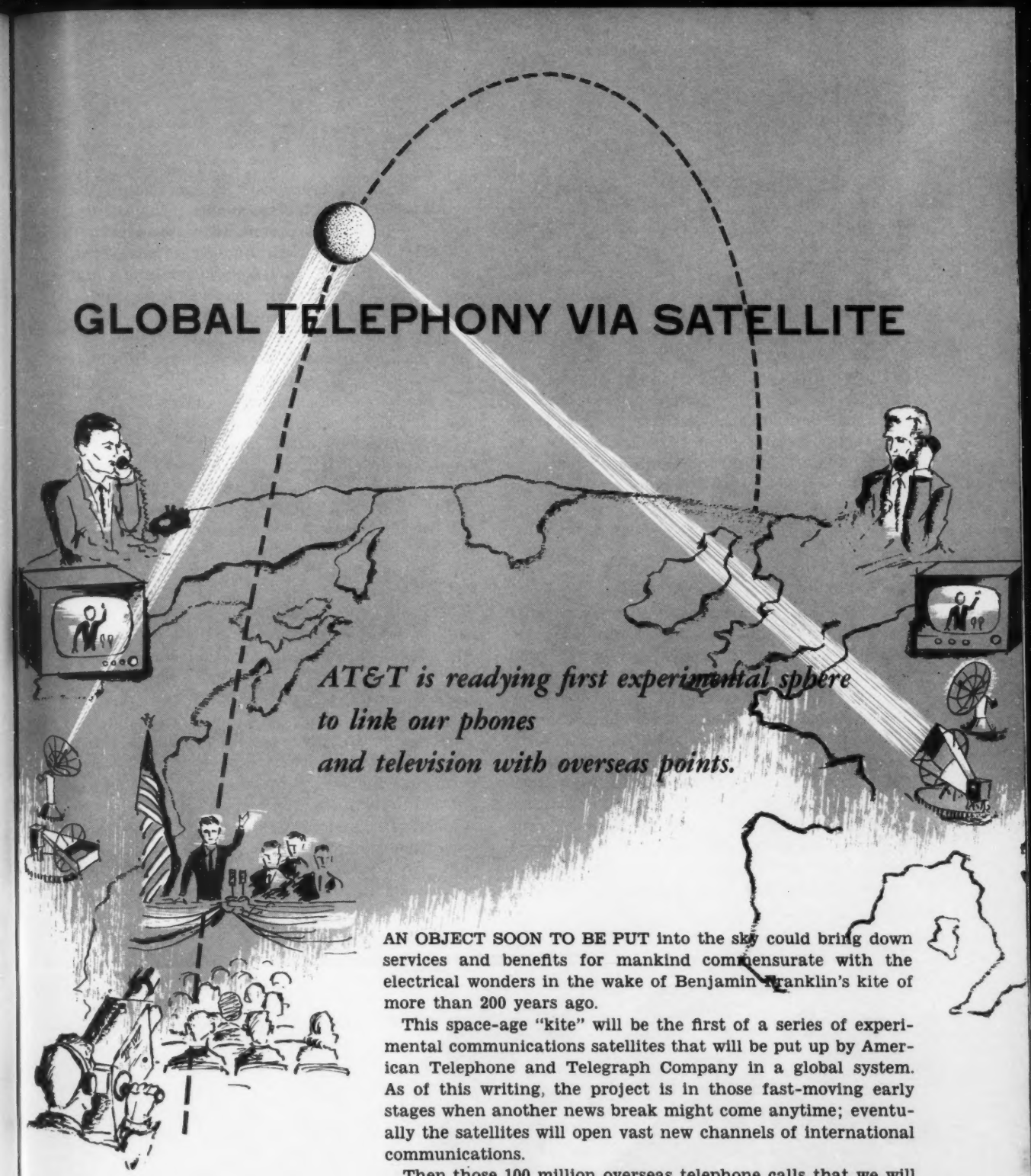
Fewer Fatalities on Limited-Access Roads

While all of these gadgets ultimately offer great promise, of more immediate help to most motorists is the growth of really good highways with broad lanes and little or no cross traffic. The 41,000-mile National System of Interstate and Defense Highways, launched in 1956, already is making an important contribution to traffic safety through reduction of fatality rates. More than 10,400 miles of this network already are open to traffic, with full completion scheduled for 1972. In several instances, fatality rates on these limited-access roads have fallen to less than one death per 100 million vehicle-miles, about one-fifth as high as the U. S. average.

When completed, the interstate network will link every major industrial center in the nation and 44 state capitals, serving 65 per cent of the nation's urban population and 45 per cent of its rural population. Even though it will comprise only one per cent of the total road mileage in the United States, it will carry at least 20 per cent of the traffic.

Whatever help these developments in traffic control have to offer will be welcome news to motorists and their insurance companies. For control of accidents, automatic or otherwise, is the only really effective way to reduce their staggering costs. ⊙

GLOBAL TELEPHONY VIA SATELLITE



AT&T is readying first experimental sphere to link our phones and television with overseas points.

AN OBJECT SOON TO BE PUT into the sky could bring down services and benefits for mankind commensurate with the electrical wonders in the wake of Benjamin Franklin's kite of more than 200 years ago.

This space-age "kite" will be the first of a series of experimental communications satellites that will be put up by American Telephone and Telegraph Company in a global system. As of this writing, the project is in those fast-moving early stages when another news break might come anytime; eventually the satellites will open vast new channels of international communications.

Then those 100 million overseas telephone calls that we will be making annually by 1980 will be expedited. But that is only one example of the potentials in this "switchboard in the sky." For the first time we will be able to view live transatlantic television that can't get here on present cable and radio circuits.

Global Telephony via Satellite

Epochal for free enterprise, the satellite would be the first to be launched under private enterprise with co-operation of the government. As such it is the forerunner of a space-communications network of 30 to 50 satellites that Bell Laboratories, research arm of AT&T, hope to open within five years. It is, moreover, insurance for U. S. leadership in peaceful and commercial utilization of space.

Substantial groundwork for the first satellite already has been covered in serious consideration that Bell Laboratories have given to satellite communication since 1954. In addition, two experimental communications satellites have been launched by the government. One is the space agency's Echo balloon "passive" satellite and the other the army's "active repeater" Courier satellite.

AT&T's communications satellite now under development at the Bell Laboratories would be "active"—a microwave tower in the sky, powered by solar cells and equipment with electronic amplifiers to receive, amplify and relay radio signals to and from the U. S., Great Britain and Western Europe. By comparison, "passive" satellites such as Echo I only reflect signals.

Potentials of the new satellite in a world heading toward a 1980 thicket of 500 million telephones and an inestimable number of television sets are belied by its size. Present plans call for a sphere four feet in diameter and weighing about 175 pounds. The first experimental unit will be used to relay two-way telephone conversations or a one-way transmission of a television broadcast. Commercially, the satellites are expected to be able to handle 600 telephone channels or one television channel. By comparison, present underseas cables can handle only about 80 telephone channels and there are no broad-band television-type facilities for transoceanic communication.

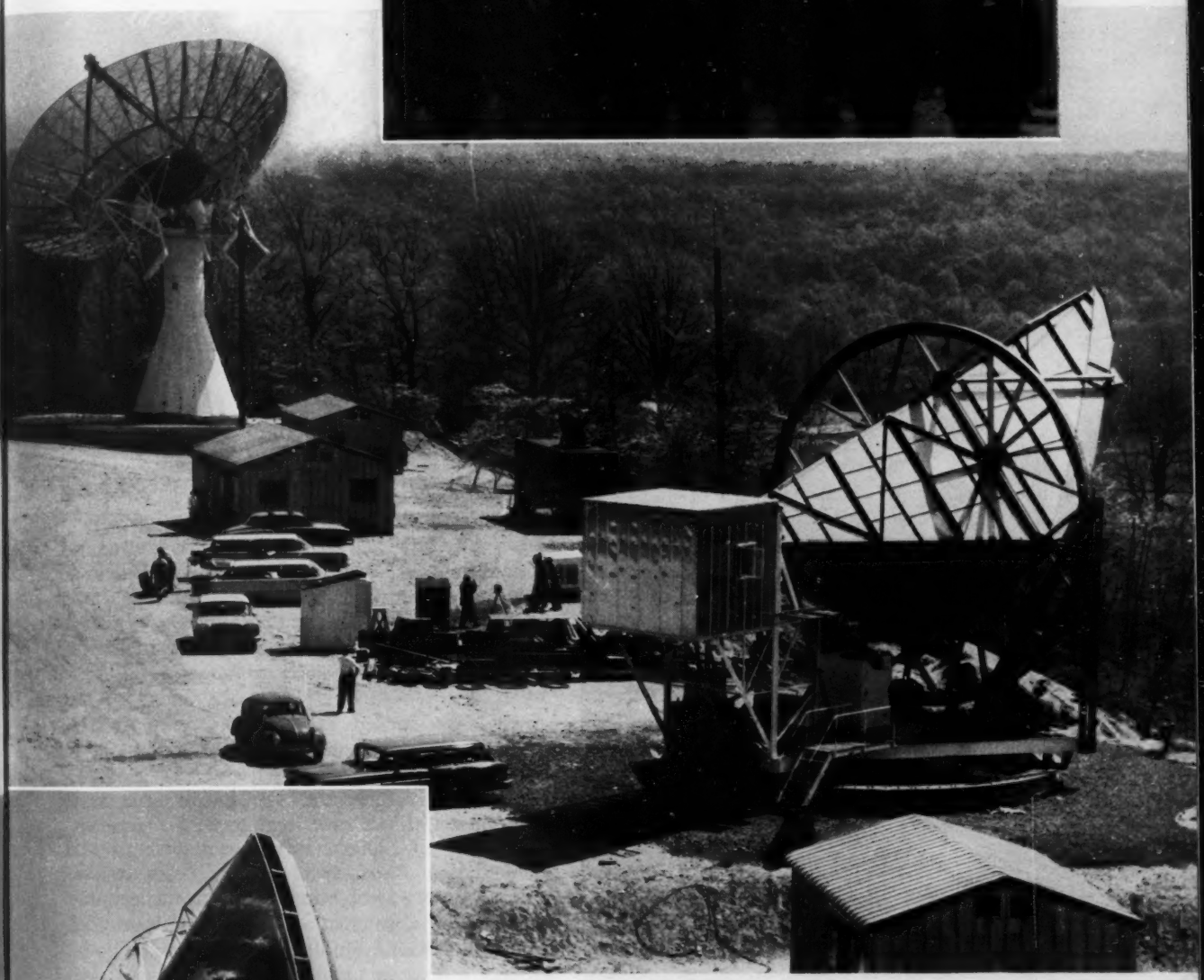
In the launching of the first satellite, the Bell system expects to work with the National Aeronautics and Space Administration which has offered to launch privately developed satellites at cost. Once aloft, the satellite will be in a 2,200-mile-high orbit, hence will not always be in range of transatlantic stations. Accordingly it will be used only three or four times a day for transmissions lasting up to about 35 minutes. But in the ultimate commercial network, there will be a series of satellites so that one can pick up the relay as another passes out of the range.

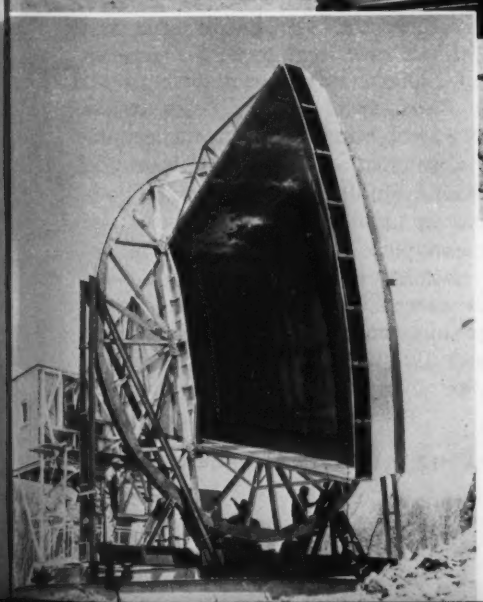
The initial experimental broadcasts will probably be between the East Coast of the United States and co-operating stations in Britain, France, West Germany and other Western European countries.

Allied with AT&T, Bell Laboratories and the government in development of the satellite communications network will be the nation's insurance industry protecting in various ways the value of life and property involved in the history-making undertaking. Estimated cost of basic facilities for providing a world-wide system giving 600 telephone circuits and television service is $170 million. ⊙

This "maser," being adjusted by Bell technicians, is a new low-noise radio amplifier making possible the most sensitive voice radio reception that has ever been devised. It will have a key role in the satellite system.

Epochal in satellite communications was this picture of top U. S. officials taken at the Bell Laboratories, then bounced off Echo satellite back to the source. The huge horn antenna in the background was utilized to receive the picture as it is seen here.

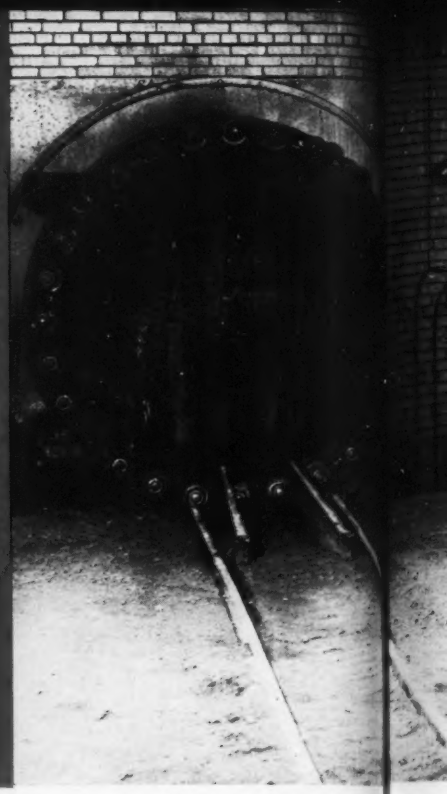




This is Bell Telephone's historic first telephone terminal to outer space at Crawford Hill, Holmdel, New Jersey. It became operative when signals from the transmitter in left background were bounced to a West Coast station via a man-made satellite. Receiver, close-up at left, is most sensitive yet built, rotates both horizontally and vertically to track fast-moving satellites anywhere. Maser amplifier is in the cab at rear.

WOOD WITH A FUTURE

Fire-retardant lumber, long perfected, gains wider usage following Constellation disaster.



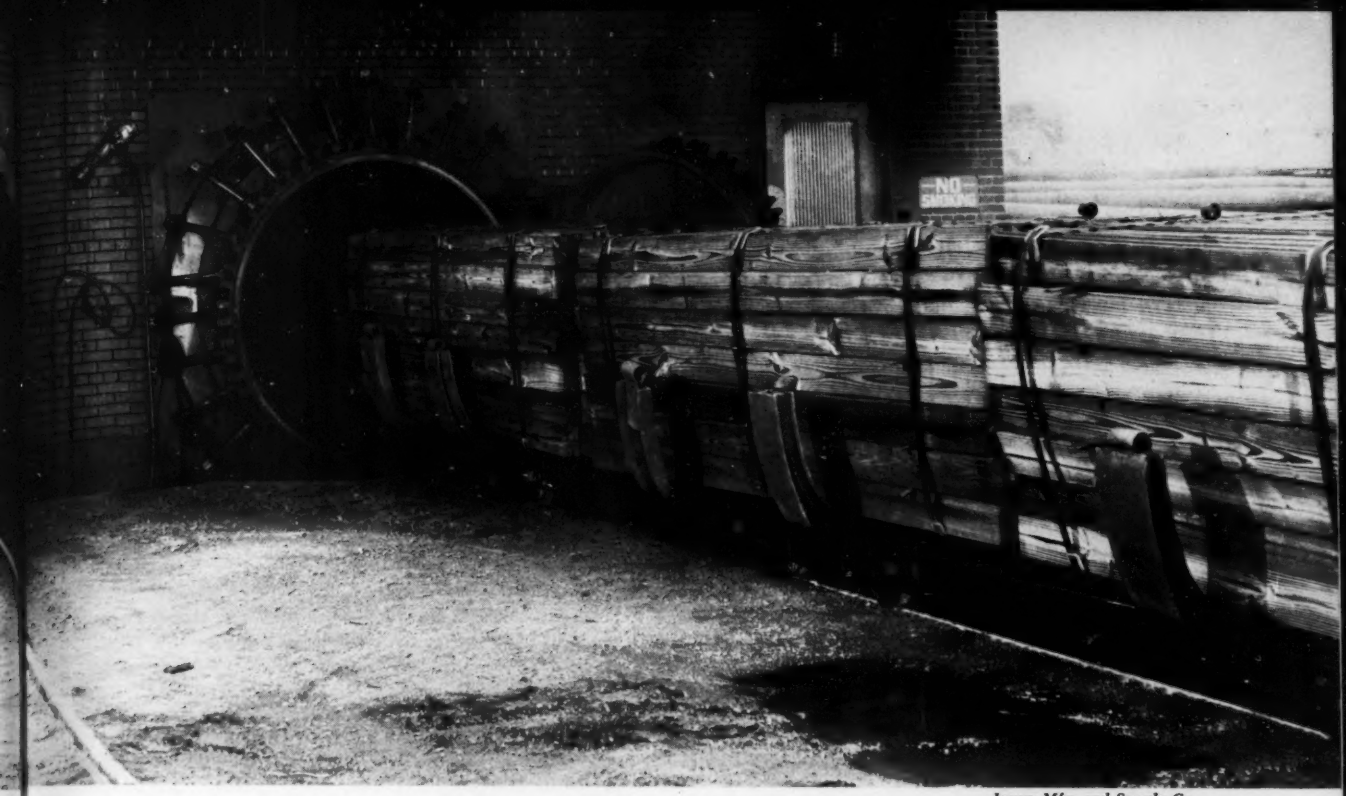
Wide World

Fire engulfed the aircraft carrier *Constellation* last December when a forklift truck sheared off a valve and flooded the deck with diesel fuel. Flames then spread to scaffolding and other flammables, killing 50 workers and injuring 300. Compensation claims are expected to total about $4 million.

ABOARD THE SUPERCARRIER *Constellation* one snowy day last December, the fateful combination of spilled diesel fuel and a welder's spark touched off a $48 million conflagration that claimed 50 lives in Brooklyn Navy Yard. In the anguished investigation that followed, New York Fire Commissioner Edward F. Cavanagh, Jr., placed part of the blame for the fire's rapid spread and searing intensity on wooden scaffolding and trash that littered the big flattop's decks.

One major result: The Navy has ordered that the *Constellation's* new scaffolding be made of fire-retardant wood — a remarkable material now finding a variety of uses in the nation's arsenal of fire protection. Fire insurance underwriters, municipal fire chiefs, building contractors and architects are all showing considerable interest in it, and proponents of the wood say it can play a significant role in reducing the nation's mounting fire losses — a toll that now exceeds $1.5 billion a year.

Fire-retardant wood is as unlike natural wood as steel is unlike pig iron. Expose a piece of it to a blowtorch and the surface



Joslyn Mfg. and Supply Co.

Lumber companies make wood fire-retardant by immersing it in a solution of chemical salts in these pressurized cylinders. Woods commonly treated are pine and Douglas fir.

slowly chars but does not burst into flames. Splash it with blazing gasoline and the flames will flicker out as soon as the gasoline is consumed. Rot and mold shun its fibers, and insects find it an unpalatable meal.

These unusual qualities are the result of a pressure-treatment process that forces several water-borne chemicals deep into the wood, which is then kiln dried. Firms equipped to treat lumber on a large scale include Joslyn Mfg. and Supply Co. of Chicago, Koppers Company, Inc., of Pittsburgh, and J. H. Baxter & Company of San Francisco.

Chemical salts impregnated by this method will remain in the wood indefinitely so long as the surface is protected from running water. These chemicals protect the wood against fire in several ways. First of all, they fill up air spaces in the wood and reduce the amount of oxygen available for combustion. When the wood is exposed to heat, the salt crystals melt and release noncombustible gases that smother the flames and retard their spread. As the exposed area begins to char, other salts fuse to form an insulating glaze over the wood.

The practical significance of all this is that buildings constructed of fire-retardant wood help keep contents fires small and localized until they either burn themselves out or firemen arrive to fight them. Smoke and heat are greatly reduced as well, enabling firemen to enter the building and get at the flames. Even more important to firemen and insurance companies, fire-retardant wood retains its structural strength even under extremely high temperatures, preventing sudden collapse of the building and preserving salvage values.

Both lumber and plywood can be treated successfully. Wood suppliers foresee increasing use of it in places that pose special fire hazards: schools, hospitals, hotels and motels, homes, farm buildings, warehouses, supermarkets, bowling alleys and other commercial and industrial structures. Builders already are using it for railroad engine houses, aircraft hangars, soap factories and other plants. More decorative uses include paneling in the UN Building and wood used to restore Monticello, Thomas Jefferson's famous home.

Attempts to make wood fireproof and durable

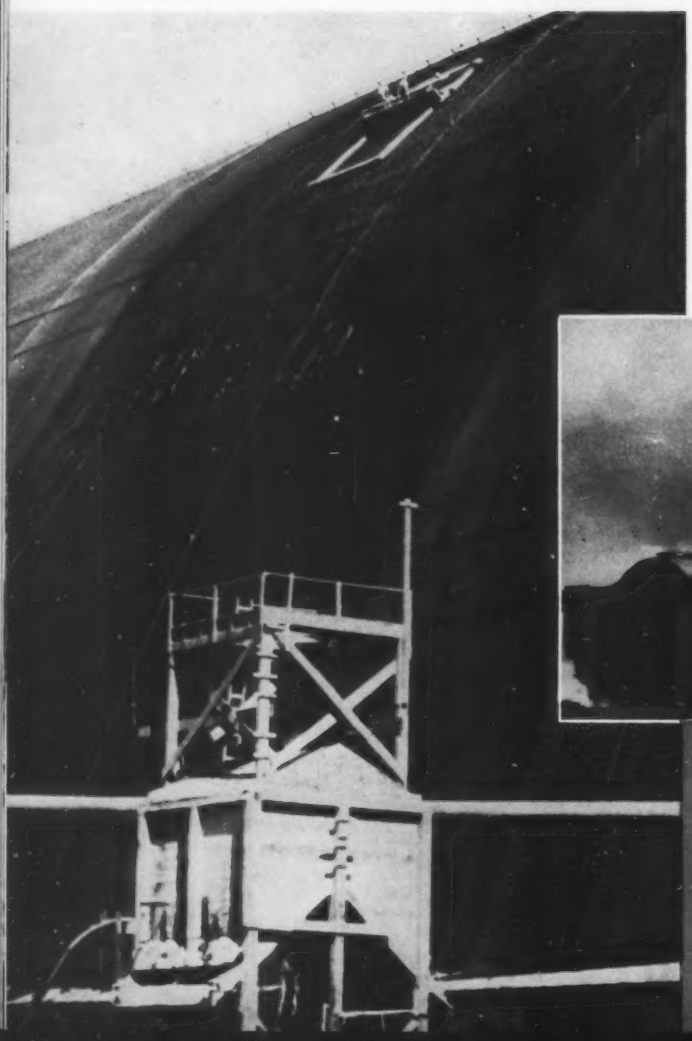
go back to the Greeks, who soaked lumber in vinegar to reduce its combustibility as early as the fourth century B.C. Ancient Egyptians tried common table salt, and the British Patent Office, in 1625, listed a concoction described as "a dressing for shippes and other vessels, their mastes, deckes, tackles, sayles and other furniture, that they maie be pserved in fight at sea from burning or consumynge by wyldefyer or gunpowder . . ."

Development of a really effective fire-retardant treatment for wood dates from 1890, when a German chemist named Max Bachert began experimenting with the pressure-treatment process and various solutions of chemical salts. He patented his process in 1893 and began producing treated lumber for sale in New York City. First commercial use of it, apparently, came two years later in the construction of the R. G. Dun Building. In 1941, the U. S. Forest Products Laboratory, Madison, Wisconsin, tested several pieces of lumber taken from this building and noted that they still possessed "excellent fire-retardant properties."

Despite Bachert's successful formula, the wood industry for many years had trouble convincing a skeptical public that fire-retardant treatments really worked. Another hindrance was that some early chemical treatments tended to corrode nails, hinges and other metal fittings fastened to the wood. These faults were cured in the 1930s, but by then the depression had killed off most of the lumber companies interested in producing fire-retardant wood. Only two plants in the U. S. were supplying fire-retardant wood when World War II began.

Faced with a severe steel shortage, the Navy's Bureau of Yards and Docks turned to fire-retardant wood for urgent wartime uses, and 10 additional treatment plants were set up across the country to supply it. Together, they produced 60 million board feet of treated lumber to build hangars for the Navy blimps used in wartime patrols along the coast.

One of these hangars, located at Tillamook, Oregon, was converted into a plywood factory after V-J Day. It caught fire in 1955 when shavings ignited in an exhaust duct and swept fire onto the 11-acre roof. Even though the fire department's streams were too weak to reach the flames, the fire went out after burning off



American Wood Preservers Institute

Tillamook hangar, which once housed Navy blimps, proved the effectiveness of treated lumber when fire burned off part of the asphalt roofing in 1955. Wooden rafters and decking resisted the flames until they finally went out, leaving the building and equipment intact. Replacement would have cost an estimated $7.5 million; actual repair bills were $21,000.

Underwriters' Laboratories, Inc.

To merit classification as a noncombustible material, fire-retardant wood must pass Underwriters' Laboratories tunnel test measuring flame-spread, smoke and fuel contribution.

part of the composition roofing. There was no structural collapse, and only 3,000 square feet of decking was replaced.

Wood suppliers contrast the Tillamook fire with the blaze that destroyed the General Motors transmission plant at Livonia, Michigan, in 1953. Here was a so-called "fireproof" building with a metal roof deck supported by steel trusses. The roof deck buckled and collapsed in a matter of minutes under the heat of a fire that melted and ignited its asphalt covering, and the entire 34½-acre building subsequently fell in ruins. Damages amounted to $55 million.

The Livonia disaster was a major turning point for fire-retardant wood, causing fire insurance underwriters to take a serious look at it for the first time in their search for improvements in roof decks. Factory Mutual laboratories built large roof assemblies of both insulated metal and fire-retardant wood and subjected them to direct flames from gasoline burners for 60 minutes. Test engineers reported the metal deck began to buckle after 8 minutes and 10 seconds with ultimate distortion so severe that it could have caused a building to collapse. The wood deck charred through after 53 minutes, but remained structurally sound throughout the test.

On the basis of this evidence, several fire insurance rating bureaus became interested in fire-retardant wood. In co-operation with Underwriters' Laboratories, they worked out a performance standard for flame spread, smoke produced and fuel contributed. To qualify, the wood must not allow flame to spread more than five feet in a 30-minute exposure to fire, with temperatures reaching 1,700°F., and it must stop burning when the burners are turned off. UL labels identify wood meeting this test.

Insurance recognition of lumber and plywood meeting the UL standard lowers insurance rates for many buildings using treated wood, and permits wood to be used in many places where it formerly was prohibited or restricted.

The wood industry and the American Wood Preservers Institute are now striving to broaden this recognition and to gain wider acceptance of fire-retardant wood in building codes. When this is done, this long-retarded product is expected to emerge at last as a major advance in fire protection for the nation's lives and property. ⊙

Joslyn Mfg. and Supply Co.

Thomas Jefferson's Monticello (above) was restored with fire-retardant wood to preserve a precious heritage. Office building of Edward Hines Lumber Company (left) also has FR wood in the roof deck, resulting in insurance savings of $950 a year. This will offset the treatment costs of about $90 per 1,000 board feet.

CROSS FIRE ON C

CANCELLATION HAS BECOME a controversial word in automotive insurance circles, causing introspection by the industry, investigation by state legislators and bewilderment among the motoring public.

Why are policies canceled? Are cancellations made justly? What recourse does a driver have? How can a motorist avoid cancellation? These are just a few of the many questions plaguing insurance companies. Answers are being marshaled, both by the companies and their associations, to clear up misunderstanding and to set matters aright where need be.

To the vast majority of auto owners, liability insurance cancellation is of little or no interest. Most drivers have never been affected by policy revocations, and chances are good that they never will. However, a minute portion—less than one per cent of the motoring public—has been hit directly by policy cancellations. In states where auto liability insurance is compulsory, cancellations are often considered as a threat to driving rights.

There are many reasons for cancellations, the major one being nonpayment of premiums by the policyholders. This, however, is not disputed, for even the most ardent critics of cancellation practices admit that payment is obligatory. Where, then, is the problem?

There are causes for cancellation which, although sound from an underwriting standpoint, may appear unfair to a few policyholders. A few companies have made a practice of canceling on a large scale, but this is not typical of the insurance industry. Nevertheless, it has not helped to create good company-policyholder relations.

Evidence that cancellations are far more limited than the critics have implied has been well established through studies. One was conducted recently at the request of a state insurance department. Twelve mutual, stock and reciprocal companies participated, and a cross section of 1,125,830 auto liability policies was studied.

Total cancellations in the study, other than for nonpayment, amount to eight-tenths of one per cent. The five mutual companies participating had an even better record, with just seven-tenths of one per cent of their policies being canceled.

Some company and broker practices need scouring, and the insurance industry is the first to admit this. It feels, though, that a solution can be brought about voluntarily rather than through government legislation.

In many cancellation cases, according to a mutual company executive, not just one but a combination of unfavorable circumstances usually exist. These add up to exceptionally serious exposures for the companies. Cancellation action, he added, is taken only after a careful review by underwriters, who must consider the effect such action will have on policyholders as well as on company agents.

As in all businesses, an insurance company cannot operate at a loss for very long. Companies feel that the rejection or cancellation of poor risks is in the best interests of their more reliable policyholders. Careless drivers

CANCELLATIONS

WHY CANCELLATION?

Cancellation of automobile insurance policies ordinarily is not done without good and justifiable cause. Relatively few motorists ever abuse their driving privileges to the extent that their policies must be canceled. Sometimes cancellation results from multiple causes. Here are a few of the leading reasons, generally recognized throughout the insurance industry, as requiring or justifying cancellation of policies:

Traffic law violations. These include driving during revocation or suspension of driver's license, permitting unqualified or unlicensed person to drive, operating unlicensed motor vehicle, hit-and-run, homicide or assault in the operation of a motor vehicle.

Use of narcotics or excessive use of liquor.

Various extraordinary hazards, such as immoral or illegal activities, illiteracy, accident or claim proneness.

Unsafe or reckless driving record. If a motorist has a history of repeated recklessness, most companies feel this is just cause for canceling.

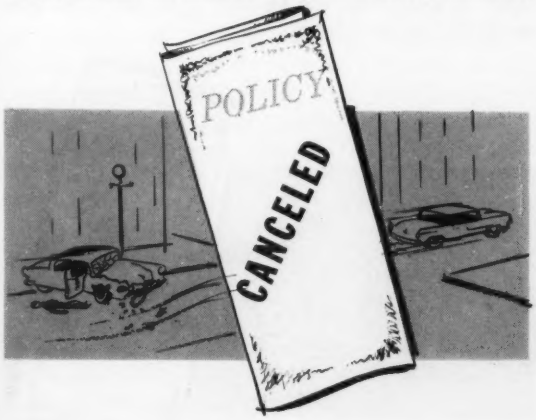
Modified vehicle, unsafe, defective or in any way dangerously equipped.

Misrepresentation or concealment, making false statements in applying for insurance or driver's license.

are a detriment not only to the insurance companies but to the entire motoring public. In states which have compulsory auto liability insurance, those drivers who have trouble obtaining such coverage are often the very same drivers who ought not operate motor vehicles. This, however, is a problem that must be solved by state licensing administrators.

Insurance companies, with the exception of a few, do not use their cancellation rights as a club held over the heads of their policyholders. According to the manager of a mutual automotive department, a single accident, or even two or three, does not warrant immediate cancellation action. Underwriters try to spot serious trouble before it happens. There is no foolproof method for doing this, but much depends on a driver's attitude, type of accident and over-all driving record, as well as on accident frequency.

For example, the policy of a 26-year-old man with no accidents or reported violations was canceled because of indications of reckless driving. He had received several warning tickets from police and showed no signs of correcting his careless driving habits. Shortly after the cancellation he skidded into an auto, rammed another car from the rear and then struck and injured a child. Within a year he had seven accidents, three involving bodily injury and all caused by negligence on his part. He still has his driver's license, and because auto liability insurance is compulsory in his state, some unfortunate insurer must make coverage available to him.

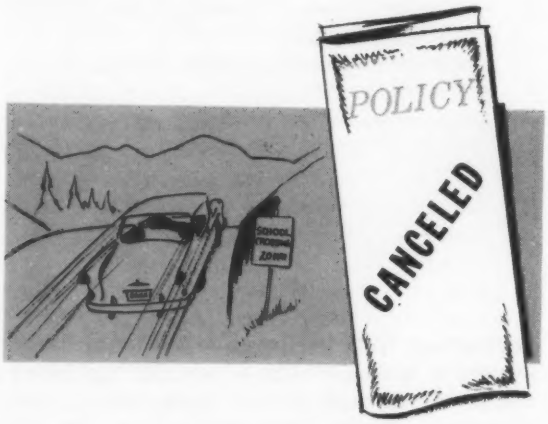


To cite an opposite of quick cancellation, some underwriters have been accused of not canceling soon enough. In one instance a 79-year-old man was involved in a minor accident in which he was entirely at fault. Traveling at a moderate speed, he missed a turn and jumped a curbing, his auto hitting a light post. Damage to the car and post amounted to $45. Several months later the same man's auto again jumped a curbing, this time hitting a benchful of people. His insurance company paid out $125,000 in settlements.

Here was an instance where the motorist had an excellent driving record up to the time of his $45 mishap. The underwriter told the JOURNAL, "It was a case where we had an advance warning but failed to heed it." It was

also a case where periodic driving tests by the state's licensing department might have sidelined the man before the catastrophe.

Another example which illustrates the problems facing underwriters in matters of policy refusal and cancellation involved an Englishman who had recently moved to this country. His driving record in Great Britain was enviable and he passed his driving test here with flying colors. He was able to purchase an auto liability policy with no trouble. Soon after the policy became effective, he struck and killed a pedestrian. He had been driving,



British-style, down the left side of a quiet highway and struck the pedestrian from behind.

What about the canceled-policy motorists? What recourse do they have? With some 73 million motor vehicles on our highways today, there are bound to be a few drivers who feel they have been discriminated against by policy cancellations. If, as these people insinuate, the cancellations were unjust, there are any number of companies ready and willing to pick up where the canceler left off, for the insurance industry, if nothing else, is highly competitive. Responsible motorists are sought after.

What about motorists whose policies are canceled by one company and who are unable to locate another voluntary insurer? For this group of drivers there is the assigned risk plan. Here the poor risks are pooled and distributed among the companies. Drivers who fall into this category have a tendency to blame the insurance industry for their predicament. There are very few drivers who will ever admit that their motoring knowhow isn't what it should be.

Complaints of these drivers can hardly be considered valid. Although they pay considerably higher premiums, these motorists have failed continually to pay their own way. Latest figures available show that total premiums for one year under the assigned risk plans amounted to $120 million. This was $52 million short of the losses and costs.

Cancellations, in common with discipline and punishment, may be getting some warped judgment in the light of present-day attitudes toward values and moral responsibility. There is the case of a father who remonstrated against the treatment of his son in a correctional institution by pleading, "Sure, he stole two cars. But he didn't strip them. He's not a bad boy."

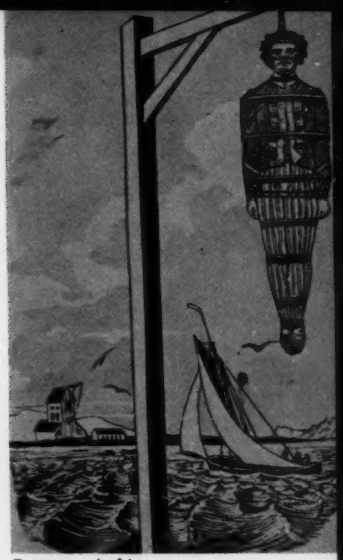
A considerable number of those whose automobile policies are canceled are just as certain that they are not "bad boys." They apparently reason, "Sure, we had a few accidents last month. But we didn't kill anyone. We're not bad drivers."

This laxity toward responsibility also shows up in some of our courts. A study made recently under the auspices of Michigan State University revealed that only one in 25 Michigan motorists involved in fatal accidents received jail sentences. Maximum penalty in the state for drivers convicted of major crimes in connection with fatal crashes is 15 years imprisonment. Actual sentences, however, were often as light as restricted driving, fines or probation.

Auto liability insurance has been written for 65 years, with cancellations following close behind. As one underwriter put it, "As long as driving is considered by some as a right rather than a privilege, we're going to have a few cancellation problems." ⊙

FROM OUR ANNALS

CAPTAIN WILLIAM KIDD 1645?–1701



Captain Kidd, whose piracy exploits were recalled by the *Santa Maria* incident, went to his execution, as it is portrayed in this old woodcut, protesting his innocence. With him went the secret of plunder that old legends say he buried on our coast.

Bettmann Archive

PIRACY IS STILL RECOGNIZED as one of the adventures and perils of the sea in modern marine insurance policies. But it virtually came to an end in our colonial trade of 260 years ago with the hanging of the notorious pirate, Captain William Kidd, on May 23, 1701.

Fanciful legends of his buried treasures live on, and his ghost reappears in such incidents as the seizure within recent months of the Portuguese cruise ship, *Santa Maria*. However, he and his kind have been gone so long off the high seas that travel agencies can safely boast, as one did during the *Santa Maria* incident, "(we have) never lost a ship or a passenger to pirates in 25 years."

If ship or passenger ever is lost to piracy, there is an applicable clause in most modern marine insurance policies:

"Touching the Adventures and perils which we, the said Underwriters, are contented to bear and take upon us, they are of the Seas, Men-of-War, Fire, Lightning, Earthquake, Enemies, Pirates, Rovers, . . ."

The original wording is preserved in marine policies because most of it has, at one time or another, stood the test of specific rulings by admiralty courts.

In marine parlance, Captain Kidd was a privateer turned pirate. A privateer holds a commission from government, authorizing him to use arms on an armed vessel against ships or cargoes of hostile nations, with right to share in the proceeds of any captures or seizures he may make. The U. S. had privateers before it had a navy, prior to 1776, and it last commissioned them in the War of 1812.

Captain Kidd, a retired New York shipowner and sea captain, was commissioned a privateer by the British in 1696 when he convinced his London peers that he could clear the seas of pirates at no expense to the government. He brought his formidable sea rover, the *Adventure Galley,* to New York, to recruit a crew of 150 men and then sailed forth in February, 1697, against the pirates in the Indian Ocean.

He still had taken no prizes as a privateer before arriving off the coast of Madagascar in July. With a "horde of men under no pay," there was a small mutiny, during which Captain Kidd struck and fatally injured one of the crew. Kidd, in the eyes of his defenders, was forced by his crew to turn pirate. Others insist Kidd planned the whole scheme himself.

Terrorizing the sea lanes for two years, he accumulated such quantities of silks, spices, jewels and money that even his men were satisfied. One of his richest prizes was the Armenian vessel, *Quedagh Merchant,* which he took for his own ship. He then either presumed or had been promised that he could bargain some of his pirated wealth for a pardon and accordingly sailed for New England. The treasure-hunters' legend still persists that he buried plunder of fantastic value along the American coast near New York until he could find out what price he would have to pay for his safety.

Price was no consideration. His friends deserted him, the English authorities then governing New York felt frustrated and betrayed, and his defense that he had no treasure but was the victim of a piratical crew was of no avail. He was sent, with his crew, as a prisoner to London, where he was tried and convicted as a pirate and for the murder of one of his crew. While still protesting his innocence, he was hanged at Execution Dock, May 23, 1701.

If Kidd's treasure is never found, perhaps he did invoke a diabolical scheme. One legend has it that he murdered a helper and buried him with the treasure as a means of warding off searchers. ⊙

THE FOUNDING STATE

Wisconsin pioneered 50 years ago this May with passage of its workmen's compensation law making provision for compensating injured workmen regardless of fault.

Several states, notably New York (1910), had passed workingmen's laws only to have them declared unconstitutional or repealed, but Wisconsin made history when on May 3, 1911, that state enacted the first constitutionally valid American workmen's compensation law to become effective in covering private employment. That same year nine other states adopted workmen's compensation laws. The historic Wisconsin act was patterned after European laws.

THE NATIONWIDE SPREAD

Similar laws are now universal throughout the U. S. and its territories. All but six states had such laws by 1920.

Workmen's compensation supersedes employers' liability and provides a definite system for making *compensation* payments to industrial, commercial or business employees if they are injured (in ways other than *"self-inflicted")* in a job covered by the law and in a manner arising out of and in the course of their employment.

State workmen's compensation laws are either elective or compulsory . . . The laws of 25 states do not exempt employers having a small work force . . . Thirty-four laws (states) have full coverage of occupational disease . . . Forty laws provide injured workers with full medical benefits, either in amount or for the duration of the medical treatment.

Furthermore, these laws are constantly being revised and modernized.

THE PROTECTED WORKERS

Protection is guaranteed for 45 million American workers on medical costs, loss of earnings, and on disability – total, partial, temporary, permanent, fatal.

The 45 million American workers—beauty parlor employees to steelworkers—who are protected under the various laws constitute 80 per cent of all workers.

Interstate railroad workers and maritime employees are covered under separate acts. Public employees in all states, Puerto Rico and D. C., have some coverage.

Since 1953 more than two-thirds of the states have broadened their laws to include additional occupations, groups of workers and types of disabilities, such as radiation and other occupational diseases. During the course of a legislative year as many as 1,500 to 1,700 laws, which may affect workmen's compensation directly or indirectly, come up for consideration in the various state legislatures.

BILLIONS IN BENEFITS

Benefits to workers now total approximately $1.4 billion annually (1960), of which roughly two-thirds was for wage compensation, one-third for medical and hospital costs.

Payments, or benefits, are of three types: (1) medical costs, (2) loss of earnings, and (3) disability—total, partial, temporary, permanent, fatal.

Current annual benefits of $1.4 billion represent a fivefold increase over the past 20 years, resulting from increases in the number of workers covered and more liberal benefit payments for injuries. Today three times as many laws as in 1935 provide maximum benefits of $40 or more a week for temporary total disability. More than six times as many laws as in 1953 provide maximum weekly benefits of $50 or more.

THE EMPLOYERS' ROLE

Employers pay the entire cost of benefits—no payroll taxes, no local, state or federal taxation. However, in some monopolistic state-fund programs there is a payroll-deduction assessment on employees.

Under the archaic common law system which prevailed prior to workmen's compensation laws, employers actually had been paying the bills of work injuries while still suffering the bitterness of the public's resentment. In 1908 it was estimated that it took $82 to get $18 through clogged courts to an injured workman. Today the cost of work injuries is considered part of the expense of production. Employers make prompt payment to injured workmen covered by workmen's compensation laws, regardless of fault and with a minimum of legal formality.

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THE PIONEER UNDERWRITER

Pioneer underwriter of workmen's compensation insurance in America is Employers Mutuals of Wausau, founded September 1, 1911.

Employers Mutuals of Wausau, founded by a group of sawmill operators and manufacturers, issued the first U. S. workmen's compensation policy, still in effect, to the Wausau Sulphate Fiber Company, now known as the Mosinee Paper Mills Co.

Today there are 73 mutual insurance companies, 246 stock companies, 13 reciprocals and six state funds affiliated in the National Council on Compensation Insurance.

Under private insurance coverage, employers pay premiums based on the types of jobs, earnings of the people employed, the average accident experience of similar employees and their own companies' accident experience.

INDISPENSABLE INSURANCE

Insurance is compulsory under most workmen's compensation laws to guarantee payment of employee benefits. In some states insurance is elective.

Insurance has been a required and integral part of workmen's compensation from the very beginning, guaranteeing that employers will be able to meet their financial liabilities no matter how long workers must be protected nor what amounts of money are involved. Employers covered by workmen's compensation are required by law to obtain insurance or to give proof of their qualifications to carry their own risks. Such employers must meet specific financial requirements. They are in effect conducting their own insurance business.

Some laws provide for state-fund insurance, either monopolistic or competitive. When the system is monopolistic, employers are required to insure their risks in the state fund; if competitive, they may choose whether they will insure in the state fund or a private insurance company or qualify as self-insurers. State funds are not created by taxation; employers pay premiums into them just as they would to a private insurance company. The 19 states which have some form of state funds are, to all intents and purposes, in the insurance business.

Private insurance is the form most frequently used because it is the logical method for even small companies to guarantee payment of claims.

LOSS-PREVENTION MEASURES

Accident prevention and the rehabilitation of injured workers constitute a major service of the casualty insurance industry to the workmen's compensation program.

Safety and well-being of workers are basic canons of workmen's compensation to the end that the burden of industrial accidents may be reduced for the individual, the public, the employer and the insurer.

For more than 200 years a principal tenet of mutual insurance has been to reduce losses so that protection might be provided at minimum cost.

Work accidents alone have been reduced by 47 per cent during the past 50 years through programs of safety and medical care in which casualty insurance companies have taken the leadership.

Forces of these companies today include specialists in: accident prevention . . . construction safety . . . in-plant medicine . . . industrial hygiene . . . medical advisory service . . . rehabilitation.

Insurance has kept its accident prevention techniques in pace with technological progress in many fields and on many job hazards, including: atomic energy . . . blasting . . . chemicals . . . construction . . . dermatitis . . . electric power . . . elevators . . . floor finish and slipping . . . lead poisoning . . . liquefied petroleum gas . . . machine design . . . mineralogy . . . noise and hearing loss . . . punch presses . . . radiation . . . silicosis . . . solvents . . . vibrations . . . weather.

THE YEARS AHEAD

Fifty years have not eliminated workmen's compensation problems for society, for the worker, the employer or insurer.

In 1960 there were 1,960,000 disabling injuries and 13,800 fatalities among U. S. workers . . . Today, in the course of an average workday, about 38 workers will be killed . . . 233 will suffer some permanent disability . . . 5,068 will suffer injuries keeping them from work for an average of 19 days . . . One American worker will be killed or crippled every 38 minutes . . . Another will be injured every 16 seconds.

But these problems of the future are no more formidable than those which workmen's compensation faced 50 years ago and on which it has amassed such a heartwarming record for its Golden Anniversary.

National Park Service Photos

HISTORIC MONUMENTS TO DARING MEN

Venturous Spaniards, braving our "mysterious" and "richest" land, bequeathed us these sites.

MYSTERIOUS, UNTOUCHED and rumored to be richer than anything yet discovered, the North American interior lured those Spanish conquistadors who made their first landing on our southern shores 422 years ago this month. For daring and promised reward, the De Soto Expedition which landed at Tampa Bay, Florida, May 30, 1539, was the "moon landing" of its time.

That de Soto landing point and 25 other sites in the Spanish exploration and settlement have been singled out by the U. S. Department of Interior for preservation and protection as the Registered National Historic Landmarks of that period in our history.

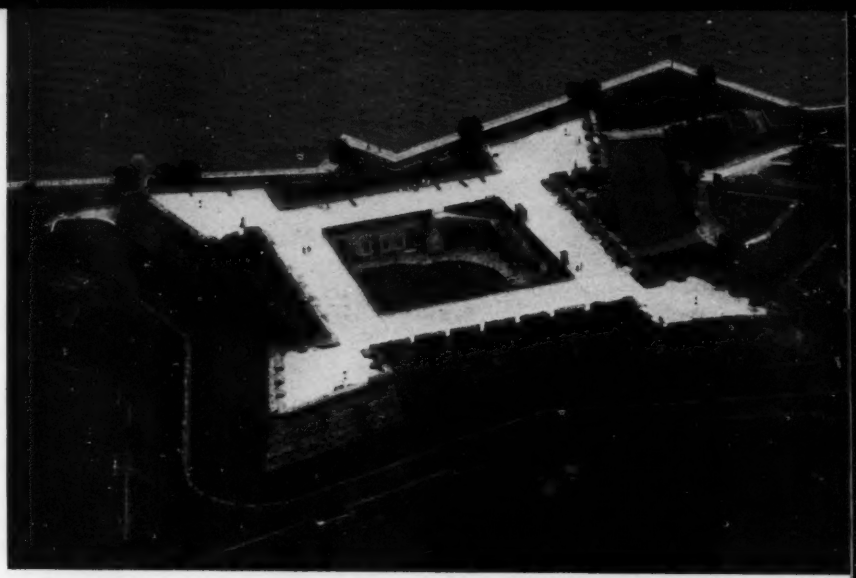
Pictured here are the 10 of those sites represented in the National Park Service. They are representative, too, of the 16 other sites, not in the national park system, but eligible to receive certificates as registered landmarks of the Spanish exploration and settlement.

The National Registry of Historic Landmarks, which will cover all the major periods of human history in America, is a product of the Historic Sites Act of 1935.

In the best traditions of insurance, the registry has been established to recognize and endorse the preservation and protection of structures and sites now administered by the states, other public agencies or historical so-

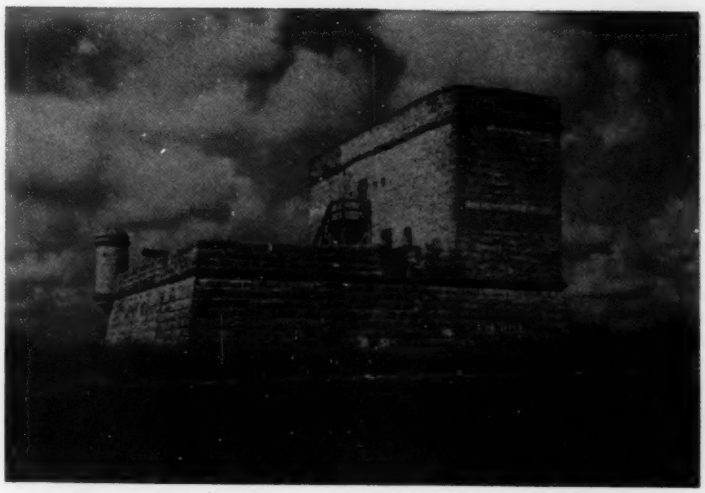
←DE SOTO TRAIL

This marker atop the Indian mound commemorates the landing site of Hernando de Soto and his army, May 30, 1539, on Florida's Tampa Bay shore, preparatory to the first European penetration into our southern regions. Finding a few ruined pearls in the dust of the deserted Indian village where they made camp, the Spaniards believed themselves standing at the verge of New World fortunes. In time they crossed 4,000 miles of wilderness, garnering for Spain priceless information on the interior lands and peoples. De Soto's first sighting of the "great river," Mississippi, was on May 5, 1541, with rumored wealth beyond it.



CASTILLO DE SAN MARCOS →

This Saint Augustine fortification was the northernmost outpost of Spain's vast empire in the New World. Florida, being close to the route of the Spanish treasure ships, was coveted by both England and France. Spain's power, centered at Saint Augustine, was entrusted to the Castillo. Construction began in 1672 and lasted almost 25 years until 1696. An impregnable fort in its day, it became the vortex of the Spanish-English struggle for the Southeast in 1650 to 1750. Then it made history under various flags until the U.S. came into possession of Florida in 1821. Militarily, it was last used during the Spanish-American war.

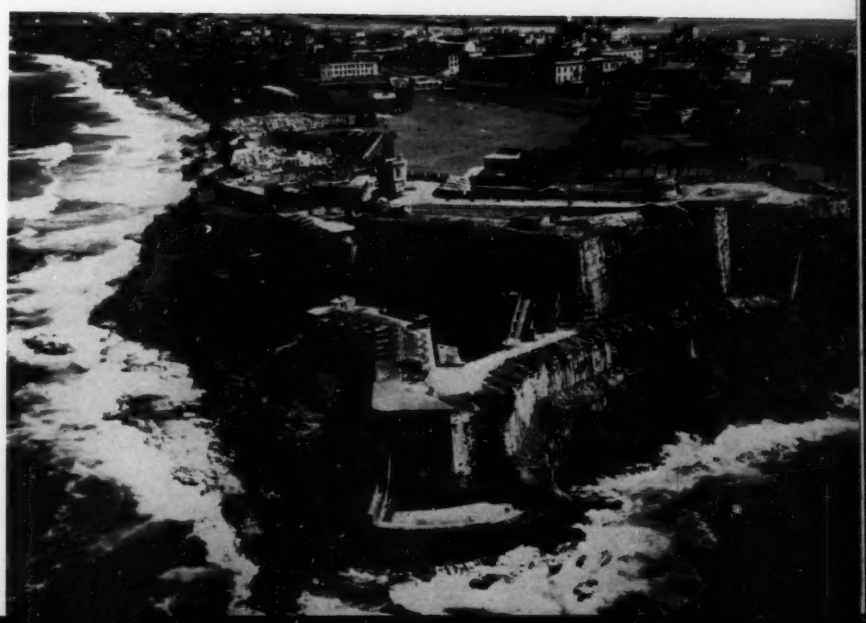


FORT MATANZAS →

Also a strategic stronghold in the colonial conflict of the Saint Augustine area, Fort Matanzas was erected by the Spanish in 1737 on the Matanzas River 15 miles south of Saint Augustine. It is near the site where Menéndez massacred Jean Ribaut and his company of French Huguenots in 1565. Both Fort Matanzas and the Castillo, as well as the city's old gates, were built of native coquina rock. The fort was made a national monument in 1924 and encompasses 228 acres. Saint Augustine, oldest U.S. city, having been founded in 1565, had a colorful history long before Fort Matanzas, soon to be 225 years old, was constructed.

SAN JUAN →

El Morro, within the city walls of San Juan, Puerto Rico, together with companion forts in San Juan National Historic Site, are the oldest fortifications of European type in U.S. territory. They were erected in the 16th century at the Caribbean gateway and harbor to provide the major defenses of the Spanish Main, protecting both the first permanent colony in the present territory of the U.S. and the Spanish treasure fleets. Today San Juan's traditions still survive in a historic bond between the Americas. San Juan's defenses were turned over to the U.S. October 18, 1898, terminating Puerto Rico's four centuries as Spanish.



Historic Monuments to Daring Men

cieties and to encourage private owners of historic landmarks to maintain such properties.

These registered landmarks are monumental in another respect. They are the bases from which evolved all that we possess and insure today. In the wake of the Spanish exploration, for example, livestock and plants were introduced which transformed life in this land. The horse, let loose by Coronado's band, found a natural home on the plains. Pigs, cattle, poultry, rabbits, sugar cane, wheat, oats, barley and rye were all brought from Europe.

Christopher Columbus gave Spain an early claim to the New World and its wealth. The Spanish explorers made the first extensive penetration and settlement. Every present-day American has been bequeathed a heritage of goods, services and liberties to preserve and protect. ⊙

SAN JOSE MISSION

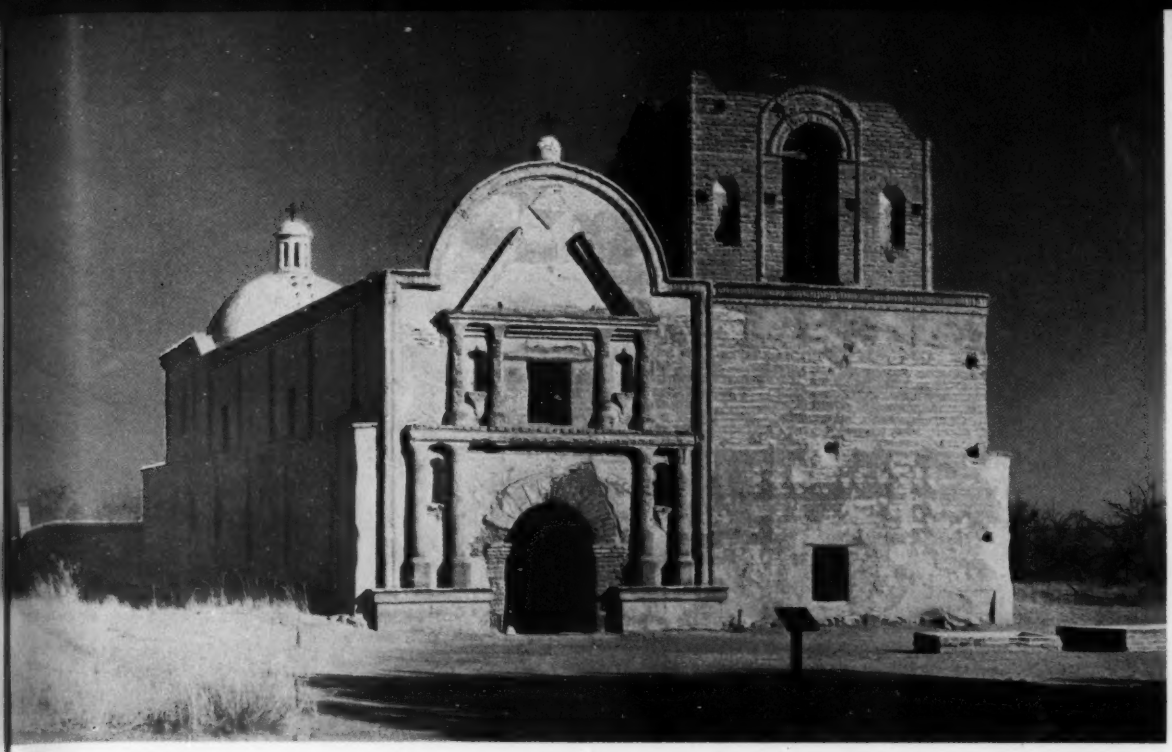
Established in 1720, San Jose, San Antonio, Texas, was known as "queen of all the missions in New Spain" stretching across the Southwest in the 18th century. Today it is considered to be one of the three finest mission groups in the U. S. The historic site is administered jointly by the National Park Service, the Roman Catholic Church and Texas agencies.

GRAN QUIVIRA →

Spanish power and authority dominant over New Mexico in the 17th century are memorialized by these ruins of San Buenaventura, Franciscan mission church in Gran Quivira National Monument. A second Franciscan mission church and 21 ruined house mounds of Indian pueblos are embraced in the monument. San Buenaventura was one of the largest missions in New Mexico.

EL MORRO →

This massive inscription rock atop a national monument in New Mexico marks a historic watering place on the trail to the fabled seven golden cities called Cibola. Symbolized in the inscriptions is the cultural mixture that took place between Indians and the people of Spain, Mexico and the U. S. First Spanish marks predate Plymouth Rock Pilgrims by 15 years.



TUMACACORI

On the national monument near Tucson, Arizona, this church of the late 1700s memorializes the missions by means of which the outlying provinces of the New Spain in South and Central America and Mexico were extended and secured among the Indian tribes. This church was the northern outpost of a mission chain constructed by Franciscan priests on sites created by the Jesuits in what was then a Mexican province.

CORONADO

Here near Bisbee, Arizona, is commemorated the first major exploration of Europeans northward from Mexico into the American Southwest. Gold and silver sought by the Coronado expedition proved to be illusionary, but knowledge gained during the extensive exploration, including discovery of the Grand Canyon, had rich potentiality.

CABRILLO →

Cabrillo's statue stands on Point Loma off San Diego Bay where his Spanish expedition on September 28, 1542, first sighted the Pacific Coast of present-day continental U.S. Later the expedition explored the entire coast of California. Cabrillo's statue, which was dedicated September 28, 1949, was a Portuguese gift to California.

Cornell University

Saved by a seat belt, the driver survived this wreck with only minor injuries. At 65 mph there was a blowout causing the driver to lose control. Vehicle skidded, snapped off a telephone pole and rolled over twice to crash here.

DO SEAT BELTS NEE

They are extolled as life savers, auto makers have acted, but the public shuns them.

A BOSTON MATRON, when asked for her opinion of auto seat belts, remarked after some thought, "In case of an accident, they are very important. Otherwise, I don't know how valuable they are."

This statement seems to reflect the attitudes of all too many motorists. That is, seat belts are fine if we're going to have accidents—but we're not planning to have any!

A bright side of seat belt acceptance is that arguments against them have all but subsided, with the overwhelming majority of motorists now voicing their approval. However, in the same breath most people confide that they don't own a set. Yet belts would have prevented 10,000 highway deaths last year if they were in use on all cars, according to research authorities on the subject.

Acceptance of safety belts might be likened to that of cod liver oil. Everyone knows it's good for humans, but getting them to swallow it is another matter. For instance, in 1955 Ford Motor Company developed a safety package in which seat belts were offered as optional equipment. That year seven per cent of Ford's new car buyers took advantage of the offer. Today the installation rate has slumped to two and seven-tenths per cent.

This buyer apathy, say domestic auto makers, is the only reason seat belts have not become standard equipment. The vice president of one company said that if public demand reaches

Indiana State Police

Driver of this auto might have been saved had he made a $15 investment to install seat belts. Damage to the interior of the car was slight, but the driver was catapulted through the windshield. An estimated 10,000 lives would have been spared last year if all motorists had been wearing auto seat belts.

Showing motorists safer ways to drive is a full-time job for Sergeant Elmer C. Paul of the Indiana State Police, a pioneeer in seat belt research. His findings have led to improvement of many auto safety devices.

[E] A CRUSADE?

seven per cent most, if not all, of the manufacturers will begin assembly line installation. This percentage has not been neared. A recent study by the Cornell University Automotive Crash Injury Research program reports that only about three per cent of this country's autos are outfitted with seat belts.

An automotive research engineer told the JOURNAL, "Seat belt sales by our dealers in the past two years have amounted to only seven-tenths of one per cent of new car sales. With such a low acceptance, there is little justification, economically or psychologically, for the industry to force 99 per cent of our buying public to purchase such equipment."

Some members of the auto industry feel that standard seat belt installation might reduce public acceptance even further. Their reasoning stems from studies which show that some two-thirds of the belts now installed go unused by their owners.

Nevertheless, there are pressures being placed by persons outside of the auto industry, demanding that safety belts be made as standard in all autos as steering wheels. One safety expert commented that if Michigan legislators alone would pass a law requiring belts as standard equipment in all cars produced in that state, the problem would be quickly solved. This move, admittedly, would not compel car buyers to use the belts, but the number of wearers would most assuredly increase. There are several states in which lawmakers have introduced legislation proposing this very thing. The bills are now pending.

Meanwhile, the auto industry has not been standing still. For the past five years nearly all of the domestic companies have been actively promoting safety belt usage and they have just recently announced that all of their 1962 models will have belt attachments. This means that reinforcement plates will be attached to the

undersides of auto bodies so that standard belts can be easily and more economically installed by auto owners.

There is some question as to whether this move by the industry can be taken as a sign that seat belts will soon become conventional. An executive for a Detroit company told the JOURNAL earlier this year that in view of the low public acceptance, permanent belt anchors could not be economically justified.

Just three weeks after this statement was made the manufacturers did an about-face and announced their plans to outfit all autos with belt anchors. Chrysler Corporation has gone one better, making seat belts available to its dealers at cost and urging them to install them on a nonprofit basis.

Aside from the continuing promotional activities, this is as far as the auto industry plans to go—for the present time. One auto executive explained, "We feel we are doing our part as an industry. However, we believe that critics of the industry can contribute more to the vital area of motoring safety by devoting greater effort to the basic issue—acceptance of safety equipment already available."

Objections to Belts Have Been Disproved

The few remaining arguments against seat belts have been proved invalid. One is that seat belts are not helpful during city or short trip driving. Cornell's study shows that 47 per cent of auto fatalities occur at speeds under 40 mph. Another argument is that belts can be a handicap, such as trapping a driver in a burning or submerging vehicle. Cornell again repudiates this with statistics based on 10,000 accident reports. Findings show that only half of one per cent of accidents are cases in which cars caught fire or were submerged. Even in this type of an accident, seat belts can prevent occupants from losing consciousness and being trapped beyond escape.

Despite these facts, motorists continue to show a preference for white walled tires, car radios and other costly extras, which have nothing to do with their motoring safety.

Another factor that seems to hinder national seat belt acceptance is that before a motorist installs a set of belts in his auto, he must first admit to himself that he is never immune to accidents. There are very few drivers who care to make this admission; most of them continue driving under the false impression that it's always "the other guy."

Organizations such as the National Safety Council, Public Health Service and American Medical Association, as well as state police agencies and the insurance industry, have made concerted efforts to convince motorists that it's this too confident "other guy" attitude among drivers which causes most of our accidents. Some 97 per cent of the motoring public apparently has not been listening.

Some Converts Have Now Accepted Belts

There are signs, however, that more motorists are beginning to perk up their ears. Company fleets are discovering the lifesaving value of seat belts. A National Safety Council poll reports that 52 per cent of the motor fleets questioned said they had some or all of their vehicles equipped with belts. More than 30 state police patrols have safety belts in all of their cars, with more preparing to adopt them. About a dozen states have made seat belts mandatory on all state-owned autos.

There is still a long way to go. Renewed and continuous educational activities for seat belt acceptance are essential. Automobile dealers and their salesmen could do more in this area, for they are in direct contact with car buyers at a time when belt installation is both simple and inexpensive. The insurance industry has led the way in encouraging safety belt use in company autos. But both companies and agents could likewise do more. For example, insurance agents, who too often underestimate their influence on policyholders, could recommend seat belt usage to their auto policy customers. These measures would not only increase good customer relations but, in the long run, directly benefit the industry through claim reduction.

Outlawing Belts Might Make Them Popular

Do seat belts need a crusade? With more autos traveling greater distances at faster speeds, there seems to be no better time than the present to advance their use.

If the public should continue to ignore seat belts after an all-out drive, then the time might be ripe for other methods. One safety belt advocate already has a suggestion. "Maybe if they were outlawed, I mean make them illegal, then maybe they'd catch on." ⊙

NOW FOR A CAREER!

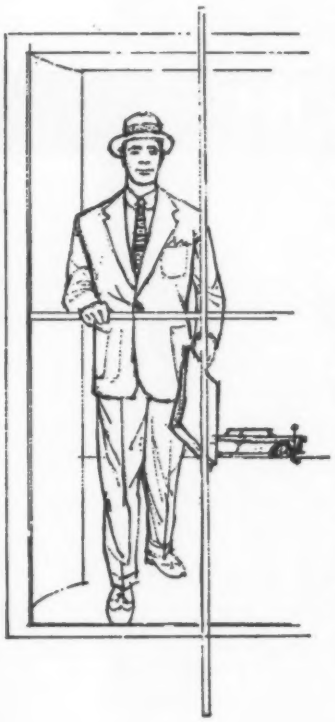
Careers in the many-faceted insurance industry beckon some 40,000 members of the college class of '61. About 25,000 graduates have studied insurance. Students here attend the University of Pennsylvania, pioneer in professional insurance education.

Personnel Director William Ryan of Kemper Insurance interviews new prospect for firms' broad training programs for college grads. Miss Mildred Siegel, assistant personnel director of Employers Mutuals of Wausau, gauges an applicant's personality, skills

Many '61 graduates will find wide and varied opportunities in insurance.

COLLEGE GRADUATIONS this year will send about 400,000 young Americans into an economy that offers substantial incentives to able workers. Since midwinter, campus recruiters for various industries have been making spirited bids for the services of top students, offering salaries three to five per cent higher than last year.

To the insurance industry, with its 900,000 employees and $35 billion in annual premiums, the college class of 1961 offers people trained to meet its growing demands. Progressive insurance companies and agencies have offered new graduates a variety of job opportunities with excellent secur-



Personal Sales

ity at salaries that approach competitive levels. Many promising '61 graduates have already been hired for insurance work, but some companies fell short of the number and quality of graduates sought.

The JOURNAL asked industry personnel managers and college faculty members to pinpoint ways insurance companies might attract the highest caliber of trainees from college ranks. Some cited the need for higher salary offers to compete with other industries. But the most important task, they agreed, is to correct misconceptions about the insurance industry held by many college students.

Foremost among these is the mistaken idea that insurance involves only door-to-door selling and actuarial work. A state university's placement director said: "Certainly an important point is to inform young persons of the varied opportunities available to them. The potential must also be stressed, with regard to income and personal satisfaction."

This view is echoed by the personnel director of a large mutual company: "College men don't think of such fields as loss prevention engineering, underwriting, journalism, public relations and advertising, finance and credit management, auditing, claims adjusting or other technical work that must be done by a company's staff." Says another personnel man: "Most college seniors see insurance as a secure but unglamourous field. Their idea of jobs is that they are either clerical or sales. There is almost no recognition of the many challenging, lucrative, diversified jobs that are available."

Recruiting brochures published by a number of mutual property-casualty companies stress the many and varied job opportunities in insurance. Employers Mutuals of Wausau, for example, publishes an elaborate loose-leaf folder that includes job descriptions. For each kind of work the book details general qualifications, training, duties, location, expense allowance and promotion opportunities.

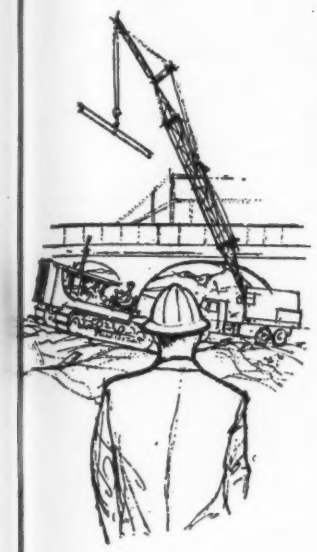
The idea that insurance salaries are significantly lower than those of other industries is another misconception, perhaps the one that most hampers recruitment. A study by Dr. Frank S. Endicott, director of placement at Northwestern University, indicates that the average starting salary offered to this year's college graduates by 210 representative business and industrial firms is $470 per month. This average is for engineering, accounting, sales, general business and other fields. The average for general business trainees alone is $438 per month.

These figures might be compared with salary offers made to this year's college graduates by various mutual property and casualty companies. One salary range runs from $350 to $410 for trainees without special technical training to as much as $540 per month for mathematicians. Another company considered raising its basic salary offer from $400 to $415 and adding a year-end bonus that would bring the monthly total to $433. Prospective claims men and engineers interviewed by another insurer were offered between $381 and $450 plus a company car.

Thus it may be seen that salaries offered by mutual property-casualty companies are not considerably lower than those of other industries. Other factors certainly weigh heavily in students' career decisions.

"The prestige angle is important," says one recruiter, "because a young man coming out of college wants to feel that he's going into a substantial business organization." To give prospects this feeling, insurance firms often show them a sketch of company history, a complete financial statement, Best's Reports on the firm and a list of

Claims Adjusting



Underwriting, Loss Prevention Engineering

honors it has won. National and local advertising, already known to the student, is sometimes reproduced in brochures as are maps indicating company offices and growth charts.

Some personnel men blame graduates' uncertainty about insurance on "fly-by-night" promoters who come to a campus and offer jobs to every person they interview. Others blame the practice of short-term hiring of college graduates by some life insurance companies.

As one executive put it: "In the past, some life insurance companies have gone into colleges and hired a lot of young men, put them to selling on a commission basis, and after they had sold their friends and relatives and could no longer maintain a normal pace, they were let out. This gave the industry a black eye." Another adds: "With the great number of life insurance companies recruiting on the campus, college seniors often feel that all insurance is life insurance, and life insurance is selling your friends. Thus, when the casualty and fire companies come along, we do not have much of a chance to interest these seniors in our program."

Many Prospects Reached in Campus Visits

Communicating the truth about career opportunities in insurance is a task of personnel directors and their staffs of interviewers and recruiters. The technique of campus visits is nothing new. Liberty Mutual has been doing it for 30 years and now keeps 16 men and a woman in the field year round visiting 100 colleges and universities. The home office of Kemper Insurance handles 25 schools, and its eastern offices visit 15 others to find about two dozen qualified recruits. Central Mutual called on 10 schools this year; Federated Mutual interviewed 300 men on 30 campuses to find 25 to 30 trainees, and Texas Employers visited nine schools in its own state. Some firms have recently instituted summer trainee programs to find outstanding junior year students.

These carefully-designed recruiting programs are aimed at bringing into the insurance field the best available college graduates, regardless of whether they have had insurance training in the classroom. "All things being equal," one personnel executive comments, "the insurance major will have the edge, but some of our best men have come from liberal arts schools." Insurance majors now number in the thousands, and about 25,000 of the class of '61 have had some insurance instruction.

Students Being Better Trained for Jobs

Departments of insurance in colleges of business administration and commerce have made their students more attractive prospects recently by adding liberal arts courses to their requirements. A professor of insurance explains the change this way, "It is our belief that a well-educated person—and this implies exposure to many areas of knowledge—will make a more competent and intelligent employee in the long run than one whose education is narrow. Moreover, I feel that it is up to the companies to train college graduates in the mechanics and intricacies of insurance."

Business Sales

Faced with varied staff requirements, personnel directors generally search in all college departments. "Often people with liberal arts backgrounds fit better into insurance than those with business administration training or other specialized majors," explains one executive. "The liberal arts people don't have a 'preconceived' niche or goal; they are more willing to work at any job assigned them without thinking immediately of promotion or job rotation to something they think they are trained for." This attitude is answered

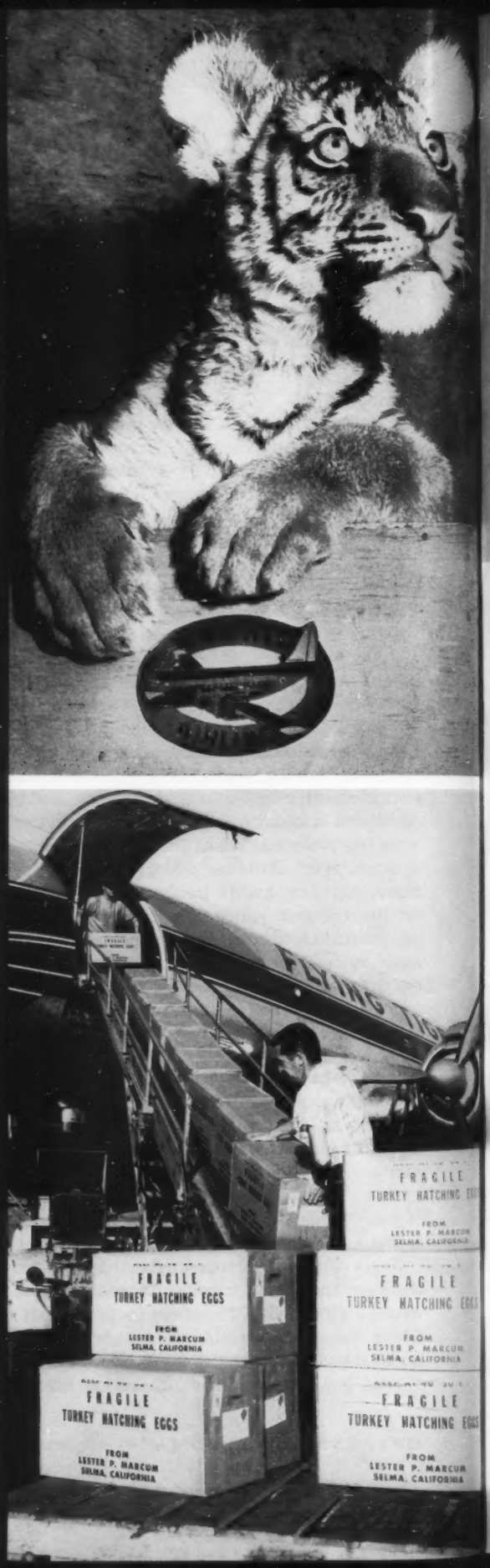
by an associate professor of insurance who says he is "skeptical of those few isolated cases in which management men have remarked that they 'prefer' liberal arts majors as interview applicants. A solid foundation in liberal arts subjects, plus reasonable specialization in insurance and business subjects, is the logical answer to the industry's needs."

A formula for filling the industry's personnel needs when competent trainees are at a premium is offered by an executive of a leading mutual company:

"If we, as an industry, develop brochures, programs and realistic salary policies and maintain our effort, we will gradually be able to improve our position in the eyes of the college seniors. We will eventually be able to show these graduates that we have in the casualty and fire industry opportunities for men to develop in a most interesting field that will reward them accordingly."

Many industry personnel executives share this attitude and are already planning insurance careers for next year's graduates. ⊙

Legal, Legislative Representation



CARGOES IN THE SKY

Airfreight has boomed into big business in anything shippable, even tigers and turkey eggs.

A UNITED AIR LINES DC-3 made a New York to Chicago flight 21 years ago with strange passengers riding in its seats. Instead of people, mail and air express bundles made the trip, marking the beginning of all-cargo service by scheduled airlines.

Today some 36 U. S. air carriers are an important arm of the transportation industry that flew 665 million ton-miles last year. Most of this cargo still flies in passenger planes, but not in seats. It rides in contoured containers in the bellies of 600 mph jets. Growth in airfreight volume is credited to ingenious advances in cargo handling, sales promotion, insurance coverages and aircraft and terminal design that have adapted air transport to the present-day needs of thousands of businesses.

Since that first cargo flight in 1940, nearly all airfreight has traveled in passenger planes or those converted to cargo configuration. By removing seats from a DC-7 passenger plane and by installing plywood flooring, smoke and fire detectors, retaining nets and anchors, an airline can have a cargo liner of 16-ton capacity for a conversion cost of $500,000.

But the key to airfreight's future lies in the greater cargo capacity and fast loading facilities of jet planes. While a jet on passenger service can carry only 40,000 pounds, it could fly 100,000 pounds as an airfreight carrier. New DC-8 and Boeing 707 jets can carry 10,000 pounds of cargo with a full load of passengers. They also offer quick loading; it takes only three minutes to load 11 cargo containers on a DC-8, but four men using forklift trucks need two hours to unload and load a conventional cargo liner.

Improved terminal facilities will include truck-to-plane gravity roller systems, electronic data-processing equipment, automatic weighing and recording devices, special security rooms for valuables and cold storage lockers. Loading time may be cut as much as 40 per cent, making jet speeds worthwhile and opening the way to increased volume and rate cuts. The current 21 cents per ton-mile average may be cut to about 8 cents before 1975.

To fill anticipated increases in cargo capacity, airlines are trying to sell businessmen on the advantages of shipping regularly by air. Airfreight, they point out, permits a business to reduce costly inventories, develop distant markets, eliminate production delays, reduce costs of packaging and cut damage to goods in transit. Savings in any of these areas

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Sultana II, 3-month-old Bengal tiger, flew as freight from Seattle to home in Cincinnati zoo. Tiny tiger, a second-generation American, traveled in a box. Turkey hatching eggs, which need speed and careful handling, go aboard Flying Tiger airfreighter on conveyor belt.

Northwest Orient Airlines
Flying Tiger Line

United Air Lines

First air express flight in World War I Handley-Page bomber started in New Jersey bound for Chicago. But winds forced the plane down in Pennsylvania.

Cargoes in the Sky

may be deducted from the additional cost of airfreight. Some shippers already find airfreight so essential that they reserve space for shipments as one might for passengers.

This new concept of regular air distribution has resulted in displacement of cut flowers as the top airfreight commodity. Machines and electrical equipment are now the top air cargo items followed in order by printed matter, flowers, wearing apparel, aircraft and auto parts, hardware, film and live animals.

Animals, though they account for only a small part of tonnage and revenue, create some of the carriers' most difficult problems. At Chicago's Midway Airport cargo handlers still ruefully remember when a cage of parrots broke in transit, permitting the biting birds to fly in the cargo liner. Unloaders, protected by gloves, chased the parrots for two hours while other cargo waited. Monkeys that escaped from crates in New Orleans had a merry time on terminal rafters until bourbon-soaked bananas unsteadied them and brought them to earth.

Ordinarily airfreight is easier to manage than parrots or monkeys. A typical air cargo flight may include publications such as Time magazine, the New York Times or the Christian Science Monitor; antibiotics, blood plasma, eye corneas bequeathed to a sightless person; or even 172 full-size refrigerators like those Conrad Hilton sent to a Latin American hotel.

Insurance is a partner of the airfreight industry from the time cargo liners are designed and built. Makers of airfreighters carry products liability insurance for protection against claims from structural or mechanical defects.

When an airfreighter goes into service its value is protected by hull insurance. Another coverage protects the carrier against public liability resulting from air cargo operations. Pilots, ground crewmen and even airlines' office workers are protected by workmen's compensation policies, many of them written by mutual companies.

Handling of billions of dollars worth of airfreight each year created a need for added insurance protection. An airline that accepts cargo shipments must state liability limits in a tariff filed with the Civil Aeronautics Board. These limits are usually 50 cents per pound or $50, whichever is greater. But the shipper may increase the limit by paying 10 cents per $100 on

Unitea Air Lines

United Air Lines

Gravity conveyor system feeds parcels to belt loader in San Francisco. Jets with swing-tail loading facilities are expected to revolutionize airfreight.

Mechanized airfreight terminal in San Francisco has 2,600 feet of conveyors that carry parcels into cargo liners. Shippers like airfreight's gentleness which reduces damage claims. Insurers rate airfreight a good transport risk.

British Overseas Airways Corporation

←
Forklift truck puts drugs and diverse cargo aboard British Overseas Airways plane. BOA's workers here are covered by workmen's compensation underwritten by a mutual company. Competition for transatlantic cargo is notably keen.

Five tons of Time magazines with pre-election story on President Kennedy are loaded in jet for delivery to Latin American countries. Publications find airfreight affords rapid distribution.

Delta Air Lines

any excess valuation. Airlines are liable within these limits for losses caused by their own negligence, but they are insured against this property damage liability.

When a shipper sends commodities not fully covered by airline liability, he may buy shippers' interest or private transit insurance. Such policies protect goods from door to door no matter how many carriers or forms of transport are involved. Rates for airfreight range from 5 to 25 cents per $100 of valuation. One form of this coverage protects against perils

Spacious cabin of DC-6A airfreighter offers 4,433 cubic feet of space. It has retainer nets, smoke and fire detection device and firm tie-down rings.

United Air Lines

Jet-PAAks, contoured containers carried in belly of Pan American's Boeing 707, carry 1,500 pounds each. Airfreight was pioneered by American Airiines in 1943.

Pan American World Airways

Cargoes in the Sky

of fire, lightning, theft, flood, cyclone, tornado, windstorm, and collision, forced landing or wrecking of the airplane carrying the insured property. Another form of coverage is all risks with the usual exclusions, two of which are of unusual importance to airfreight shippers. No coverage is provided for inherent vice, as disease in horticultural products, or for delay in delivering certain perishable items, which are frequently part of a cargo liner's load.

Accelerated claims procedures are used under carriers' liability and airfreight shippers' interest insurance because of airfreight's speed and because consignees eagerly await critical shipments.

Underwriters of inland marine insurance find that airfreight is generally a better risk than surface shipments. Most losses occur, in fact, while air cargo is en route to or from an air terminal. Better loss experience with air shipments results in part from elimination of warehousing; air cargo is kept moving, thereby reducing theft possibilities.

But much credit for the low loss ratio must go to aircraft designers and airline executives who stress loss prevention in airfreight operations. Cargo liners are equipped with smoke and fire detectors that run through the cargo cabin to the cockpit. Nylon crash nets retain even the heaviest commodities, preventing them from damaging the plane or injuring crew members. A series of lines, hooks and eyes secures cargo to a sturdy plywood floor. Most cargo planes are heated throughout, though cargo pits of passenger planes are not. Perishable products and such weather-subject cargo as hatching eggs and chicks are rushed into terminals immediately after landing.

These loss prevention measures result from careful studies by consulting engineers, many of them insurance-trained to find and eliminate hazards that could prove costly.

With a lift from protective insurance, cargoes are destined to create a new and flourishing commerce in the sky. ⊙

Efficient economical service distinguishes the Ohio staff headed by Edward A. Stowell.

STOWELL OF OHIO

FROM THE OBSERVATION post of its protective role, insurance can testify that Ohio has been staking out some new frontiers of its own. There are 301 industries in the state that either built new plants last year or expanded old ones. Prospects are that the pace will continue, for Ohio is one of the world's largest and most diversified industrial complexes with several reputations to maintain, including "best location in the nation" and "heart of industrial America."

Whatever setbacks the state may encounter in its forward surge will be minimized by an insurance industry which paid out more than $841 million in Ohio losses and benefits, exclusive of annuity payments, in 1959. During that same year the 954 insurance companies authorized to do business in Ohio swelled the state's revenues by more than $31 million in fees and taxes, almost double the 1950 total. Protection of the value of Ohio life, limb and property was provided by the 954 companies in 1959 to the extent of a premium volume of more than $1.75 billion.

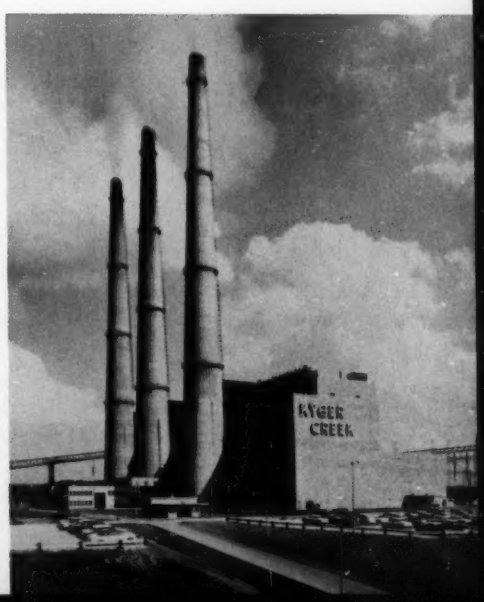
Ohio, in fact, has had a warm affinity with insurance for 150 years following the worst earthquake in America which rocked the Ohio and Mississippi Valleys on December 16, 1811, with incalculable loss of life and property. But Ohioans are grateful that they have been blessed with an ideal climate for industrial and economic development as well as for the state's diversified agriculture yielding cash receipts of $1 billion a year.

One-fifth of the nation's steel is produced in Ohio. Only Michigan outranks Ohio in automobile production, but Ohio ranks as the rubber capital of the world. The state also leads the nation in machine tools and clay products. Two waterways—the Ohio River and the St. Lawrence Seaway—border Ohio with the main arteries of an unexcelled transportation system.

Eight presidents have come out of Ohio. The names of Thomas A. Edison and Charles F. Kettering memorialize the state's leadership in invention and research. John "Johnny Appleseed" Chapman was one of the original Ohio innovators, and William Dean Howells distinguished his native Ohio as "dean of American writers" in the early 1900s.

Edward A. Stowell has been superintendent of insurance since January, 1959, serving as 35th in a succession of superintendents going back to 1872. A native of Illinois, he is an adopted son of Ohio who was graduated from Oberlin College in 1947 and from Toledo University Law School in 1951. He served for three years in the Navy during World War II.

Before becoming Ohio superintendent of insurance, Stowell was with the trust department of the Toledo Trust Co., an agent of the New York Life Insurance Company, and an attorney. As an active member of the National Association of Insurance Commissioners, he has had assignments on six different committees. Insurance and its administrators have been integral parts of the body politic of Ohio ever since 1830 when the state passed its first act taxing insurance companies. ⊙



Energy for Ohio's expanding economy originates in many huge plants typified by this Kyger Creek power supplier near Gallipolis.